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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,370	01/30/2001	Martin-Peter Bolz	1438	1519

7590

03/28/2002

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,370

Applicant(s)

BOLZ ET AL.

Examiner

HANH NGUYEN

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 30 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (78) in line 3,9 and (68) in line 16 Col. 10. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: "controllable" should be "controllable" in line 10, Col. 4; "a synchronous drive" should be "an asynchronous drive" in line 8, Col. 4 and in line 8, Col. 10; "a synchronous motor" should be "an asynchronous motor". Reference sign (59) should be (49) in line 9 and (68) should be (58) in line 19, Col. 6. Reference sign (17) should be (73) in line 12, Col. 10. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 2-12 are dependent claims of claim 1.

Claim 3 recites the limitations "one of said part" and "the other said part" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitations "of said shaft", because claim 12 is dependent on claim 1 and claim 8, it is not clear that it refers to motor shaft or pump shaft. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 are rejected under 35 U.S.C. 102(a) as being anticipated by Lustwerk.

Regarding claim 1, Lustwerk disclosed an electrical machine comprising a stator housing; a shaft supported in said stator housing and carrying an impeller (rotor); a stator plate pack mounted on said stator housing and surrounding said impeller (inherent in an electric motor); means forming a stator and a rotor chamber (72 in Fig. 1) and a space (front part of housing 10) which is separated from said chambers in a cooling medium tight manner; a cooling medium pump

(18) which is driven by a shaft for heating a cooling medium (Col. 1, line 23), said cooling medium pump being arranged in said space; a magnetic coupling (70 and 52) through which said cooling medium pump is drivable and which transmits a driving moment from said shaft to said cooling medium pump, said magnetic coupling having a driving part (70) and a driven part (52) which are separated from one another by a magnetically inactive (non magnetic material in Col. 5, line 57) and electrically poorly conductive (inherent because most of non magnetic material are electrically poorly conductive) wall.

Regarding claim 2, Lustwerk also shows an electrical machine wherein driven part is formed as a magnetic disk with permanent magnets.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustwerk in view of Bushman.

Regarding claim 3, Luskwerk shows all limitations of the claimed invention except showing one of said parts being formed as an exciter while the other of said parts is formed as an electrically highly conductive disk.

However, Bushman shows a driving mechanism wherein one of the disk is formed as an electrically highly conductive disk (Col. 1, lines 65-67) for the purpose to reduce cost.

Since Lustwerk and Bushman are in the same field of endeavor, the purpose disclosed by Bushman would have been recognized in the pertinent art of Luskwerk.

It would have been obvious at the time of the invention was made to a person having an ordinary skill in the art to form one of the disk in a magnetic coupling an electrically highly conductive disk as taught by Luskwerk for the purpose to reduce cost.

Regarding claims 4 and 5, the magnetic coupling disclosed by Luskwerk, modified by Bushman shows all limitations of the claimed invention but does not specify the driving part or the driven part is an exciter and the other part is an electrically highly conductive disk. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make either the driving part or the driven part is exciter since the examiner takes an Official Notice of the equivalence of making driving part as said exciter and said driven part is formed as said electrically highly conductive disk or driven part as said exciter and said driving part is formed as said electrically highly conductive disk for their use in magnetic coupling and the selection of these known equivalents would be within the level of ordinary skill in the art.

6. Claims 6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustwerk in view of Bushman and further in view of Guckel et al.

Regarding claim 6, Lustwerk and Bushman show all limitations of the claimed invention except showing exciter is formed as an element selected from the group consisting of an electromagnet element and a permanently magnetic element.

However, Guckel et al. show an exciter is formed of electromagnetic element (Fig. 11 and Col. 6, lines 35-54) for the purpose to create magnetic poles.

Since Lustwerk, Bushman and Guckel et al. are in the same field of endeavor, the purpose disclosed by Guckel et al. would have been recognized in the pertinent art of Lustwerk and Bushman.

It would have been obvious at the time of the invention was made to a person having an ordinary skill in the art to form an exciter with electromagnetic element as taught by Guckel et al. for the purpose to create magnetic poles.

Regarding claim 7, Guckel et al. also show the electrical machine wherein the electromagnet has a coil with a current which is controllable or regulatable (inherent).

8. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustwerk in view of Laing.

Regarding claim 8, Lustwerk shows all limitations of the claimed invention except showing an electrical machine further comprising an outer housing which surrounds said stator housing so that a part of a cooling medium circulation is provided between said stator housing and said outer housing. The electrical

electrical machine disclosed by Lustwerk can be used to circulate cooling fluid (Col. 1, line 23) for other machine but does not have the structure to cool itself.

However, Laing discloses an axial flow pump further comprising an outer housing (Fig. 1) which surrounds said stator housing so that a part of a cooling medium circulation is provided between said stator housing and said outer housing. for the purpose to cool the machine.

Since Lustwerk and Laing are in the same field of endeavor, the purpose disclosed by Laing would have been recognized in the pertinent art of Luskwerk.

It would have been obvious at the time of the invention was made to a person having an ordinary skill in the art to form an electrical machine further comprising an outer housing which surrounds said stator housing so that a part of a cooling medium circulation is provided between said stator housing and said outer housing as taught by Laing for the purpose to cool the machine.

Regarding claim 9, Lustwerk also shows an electrical machine wherein said outer housing has a cooling medium inlet (20 in Fig. 7) which is central to said shaft and in which a first bearing point for a pump shaft is located (88 in Fig. 1).

Regarding claim 10, Lustwerk also shows an electrical machine further comprising means forming a stator and rotor chamber side wall region (10b in Fig. 1) which separates said driving part and in which a second bearing point for said pump shaft is located (82 and 84 in Fig. 7).

Regarding claims 11 and 12, Lustwerk also shows an electrical machine wherein said wall region is a part of a housing bottom which closes said stator

and rotor chamber and receives a bearing as clearly shown in Fig. 7. The wall region is a part of a wall part which is releasable independently of a bearing of said shaft (as shown in Fig. 1 and Fig. 7, the wall part 10 can be released independently from the bearing of the driving shaft.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703) 305-3466. The examiner can normally be reached on Monday through Friday.

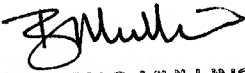
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

March 14, 2002

HNN


BURTON S. MULLINS
PRIMARY EXAMINER